#### SAILING DIRECTIONS CORRECTIONS

### PUB 174 8 Ed 2000 LAST NM 14/02

Page 122—Line 19/R to Page 125—Line 3/L; read:

The channel between Pulau Anaksambu and Pulau Sambu is suitable only for small craft.

**Temasek Fairway**—Due to the reclaimation of land, Temasek Fairway must be traversed to access West Jurong Channel. The fairway lies between Sulton Shoal Light on the W and Jurong Island on the E.

### **West Jurong Channel**

**9.11 Tanjong Gul** (1°17.7'N., 103°39.9'E.) is a fairly high bluff, steep-to from seaward, and generally sloping gradually toward the interior. It is covered with timber, though there has been some attempt at clearing on the E slope. Two radio towers stand about 4 miles N of the point.

**Long Shoal** (1°17'N., 103°39'E.) lies on the N side of West Jurong Fairway about 0.4 mile SW of Tanjong Gul. A least depth of 1m lies over an obstruction located on the shoal. The shoal is marked close NE by a lighted buoy.

From Tanjong Gul, the coast extending E to **Sungi Pandan** (1°18'N., 103°45'E.), a distance of about 6 miles, consists of mangrove swamps, backed by hills 30 to 61m high and fronted by reefs, on which lies Pulau Samulun and Pulau Damar Laut, both of which are described later.

**Gul Channel** (1°18'N., 103°40'E.), a basin with general depths of 4.3 to 6m, lies close ENE of Tanjung Gul. Repair berths, with alongside depths of 7 to 10m, occupy the NE side of the basin. There are also two drydocks, the largest of which can accommodate vessels up to 300,000 dwt.

**Benoi Basin** (1°18'N., 103°41'E.), whose depths are best seen on the chart, lies close E of Gul Channel.

The Mobil Oil Singapore oil depot is close E of Benoi Basin. The tidal rise at the oil depot is 3.4m at springs and 0.6m at neaps. The currents parallel the pier faces with the ebb flowing E and the flood flowing W.

**Depths—Limitations.—**The T-head pier provides four berths while an L-head pier provides two berths, the locations of which can best be seen on the chart, as follows:

- 1. Berth No. 1 is about 305m long, with an alongside depth of 14.2m. It can accommodate vessels up to 120,000 dwt.
- 2. Berth No. 2 is 250m long, with an alongside depth of about 13.1m. It can accommodate vessels up to 50,000 dwt.
- 3. Berth No. 3 is 200m long, with an alongside depth of 14.6m. It can accommodate vessels of 50,000 to 30,000 dwt.
- 4. Berth No. 4 is 150m long, with an alongside depth of 9.4m, although caution is necessary as an obstruction, with a charted depth of 7.4m, lies close N of the berth. The berth can accommodate vessels up to 5,000 dwt.
- 5. Berth No. 5 is located on the NE extremity of Pulau Pesak, on the S side of Selat Jurong. The berth is 250m long; it has an alongside depth of 14.8m and can accommodate vessels up to 50,000 dwt.
- 6. Berth No. 6 is 116m long, with an alongside depth of 7.8m.

- 7. Berth No. 7 is located about 0.4 mile W of Berth No. 6, with an alongside depth of 14.7m.
- **9.12 Pulau Samulum** (1°18'N., 103°42'E.), 21m high, lies E of the Mobil Oil Singapore oil depot. A shipyard is located at the S end of Pulau Samulun. The facilities include a drydock 270m long and 40m wide that will accommodate vessels up to 90,000 dwt, and a newer drydock that will accommodate vessels up to 300,000 dwt. There is also a floating drydock of 2,000 tons lifting capacity.

# **East Jurong Channel**

**9.13 Pulau Damar Laut** (1°18'N., 103°43'E.), 17m high and lies about 1 mile E of Pulau Samulun. A causeway joins Pulau Damar Laut with Jurong Island separating West Jurong from East Jurong Channels. A prominent chimney, which sometimes shows a flare, stands about 2 miles WNW of Pulau Damar Laut; another chimney, marked by obstruction lights, stands 0.8 mile NNW of the same island.

The S side of Pulau Damar Laut is composed of a continuous quay, consisting of six berths, each with a depth of 18m alongside. A directional light stands close to the E of the easternmost berth.

**Port Jurong** (1°18'N., 103°44'E.), abreast the NE side of Pulau Damar Laut, has a total berthing length of 1,517m, with alongside depths of 6.4 to 13m.

**Sungai Jurong** (1°18'N., 103°44'E.), entered close E of Port Jurong, is the designated fishing harbor, and has a least depth of about 3.4m in the fairway. Many oil pipelines, best seen on the chart, lie in Selat Jurong.

The GATX Terminal, a T-head wharf, lies SE of the entrance to Sungai Jurong. Berth 1, with an alongside depth of 14m, can accommodate a vessel up to 85,000 dwt, with a maximum length of 320m. Berth 2, with an alongside depth of 13.2m, can accommodate a vessel up to 5,000 dwt, with a maximum length of 116m.

The Caltex Asia Terminal, which consists of five sets of breasting dolphins, with a total of seven berths, is close SE of the GATX Terminal. Berth 1, with an alongside depth of 13.6m, can accommodate vessels up to 100,000 dwt, with a maximum length of 335m. Berth 2, with an alongside depth of 13.3m can accommodate vessels up to 32,000 dwt, with a maximum length of 183m. The remaining berths are best seen on the chart.

**Sungai Pandan** (1°18'N., 103°45'E.) is entered close E of Tanjung Penura. The coast for 2 miles S and E of Sungai Pandan is fronted by drying sandbanks, and sometimes marked by pile beacons, extending up to 1 mile offshore.

Eastward of these sandbanks, the coast trends 2 miles SE to **Tanjong Berlayar** (1°16'N., 103°48'E.).

**9.14** Pasir Paluang Terminal (1°17'N., 103°47'E.) has 1,321m of berthing space, with alongside depths of 7 to 10.6m. The controlling depth of the fairway approaching the berths is 11.5m.

A tower stands about 0.2 mile NW of **Tanjong Berlayar** (1°15'48"N., 103°48'24"E.).

## **Jurong Island**

Jurong Island is formed by reclaimed land. At one time it consisted of six islands (Pulau Pesek, Pulau Ayer Chawan, Pulau Merlimau, Pulau Seraya, Pulau Ayer Merbau, and Pulau Sakra). A causeway now bisects Selat Jurong connecting Jurong Island with Singapore, forming West Jurong Channel and East Jurong Channel.

The oil wharf located on the N side of Jurong Island W of Pesek Basin is part of the Mobil complex and has been previously described in Benoi Basin. Another T-headed pier, with an alongside depth of 14.7m, extends NW close W of the Mobil piers.

Three T-headed jetties are located on the NE corner of Pesek Basin, with 10 to 15m alongside.

The Esso Refinery, a bunkering terminal, is located on the S side of Pesek Basin. The tidal range at the terminal is 2.1m at springs and 0.9m at neaps.

A jetty provides five berths at T-head projections. Each berth is capable of stern loading to conventional service.

The berths are numbered from S to N; limiting dimensions are given below:

- 1. Berth No. 1, with a length of 91m and a depth alongside of 9.4m, accommodates vessels up to 35,000 dwt.
- 2. Berth No. 2, with a length of 198m and a depth alongside of 12.7m, accommodates vessels up to 25,000 dwt.
- 3. Berth No. 3, with a length of 244m and a depth alongside of 12.4m, accommodates vessels up to 48,000 dwt.
- 4. Berth No. 4, with a length of 305m and a depth alongside of 15.8m, accommodates vessels up to 80,000 dwt.
- 5. Berth No. 5, with a length of 305m and a depth alongside of 15.8m, accommodates vessels up to 90,000 dwt.

The Singapore Petroleum Company Pier, located at the head of East Jurong Channel and the N side of Jurong Island, is a T-headed pier extending about 0.3 mile N. Berth 1 and Berth 2 have alongside depths of 15.7 and 15.4m, respectively, and can each accommodate a vessel with a maximum length of 290m.

Berth 5 has a depth of 10.7m alongside and can accommodate a vessel with a maximum length of 115m.

The Seraya Power Pier, a T-headed oil pier, extends about 0.2 mile NE, from the NE side of the island. The Oil Tanking Ltd Pier lies close SE of the power company pier. The Seraya Chemical Pier is located on the SE side of the E most point of Jurong Island. Berthing information is given in the accompanying table.

Berthing Facilities (2001)					
Berth	Length	Depth	Remarks		
Seraya Power Pier					
1	260m	14.8m	Maximum vessel length of 250m.		

Berthing Facilities (2001)					
Berth	Length	Depth	Remarks		
2	200m	12.6m	Maximum vessel length of 250m.		
Oil Tanking Ltd Pier					
MJ1	140m	15.4m			
MJ2	384m	15.4m			
МЈ3	124m	14.5m			
MJ4	312m	14.8m			
MJ5	140m	13.4m			
MJ6	180m	12.5m			
Seraya Chemical Pier					
1	162m	13.8m	Maximum vessel length of 162m.		
2	216m	12.6m	Maximum vessel length of 216m.		
Van Ommeran Terminal					
2		12.6m	Four jetties allowing 800 to 150,000 dwt.		
Sempec Terminal					
1		13.6m	WSW of Van Ommeran, has a T-head pier.		

- **9.15** Sakra Basin (1°16'N., 103°43'E.) has been established on the S coast of the island; berthing facilities are described below:
  - 1. Berth No. 1 has a depth alongside of 2.5m and is used by barges.
  - 2. Berth No. 2, with an alongside depth of 9.5m, can accommodate vessels up to 165m long.
  - 3. Berth No. 3, used by tankers, has an alongside depth of 8.6m and can accommodate vessels up to 130m long.
  - 4. Berth No. 4 and Berth No. 5 are used by tankers. They each have a depth alongside of 11.8m and can accommodate vessels up to 130m long.

### Selat Sinki

**9.16** Selat Sinki (1°15'N., 103°44'E.) is the deep channel by which Keppel Harbor (1°16'N., 103°51'E.) is approached from the Strait of Malacca; it is bounded on either side by islands and reefs.

Between Sultan Shoal and Cryene Reef the channel is about 7 miles long, at its E and narrowest part, it is about 0.5 mile wide, with irregular depths of 12.8 to 29.3m.

Vessels going both to and from Europe now use Selat Sinki as the direct route. The channel is available at all times, but night navigation requires local knowledge.

The maximum velocity of the current is 3 knots; the flood current sets W and the ebb current sets E.

Pilotage is compulsory; see paragraph 9.2 for further information.

**9.17** Sultan Shoal (1°14'N., 103°39'E.), circular and about 0.7 mile in diameter, lies on the N side of the W entrance to Selat Sinki; a short pier extends NE from the lighthouse that stands on the shoal. Close W of the shoal are depths of 5.5 to 7.3m, but the E side of the shoal is steep-to.

A light, which is equipped with a racon, is shown from a tower rising from a small dwelling. A wreck, with a depth of 9.3m, lies about 0.3 mile SE of Sultan Shoal.

The N shore of Selat Sinki is formed by Jurong Island.

**Terumbu Serebut** (1°15'N., 103°42'E.), a drying reef, lies about 0.6 mile S of the S side of Jurong Island. The S side of the reef is marked by a lighted beacon.

**Cyrene Reefs** (1°15'30"N., 103°45'00"E.) lie 0.9 miles SE of Jurong Island. The reefs are about 1 mile in extent, consisting of four patches partly drying at LW, with deep water around them. Shoal depths within and in the vicinity of the reef may best be seen on the chart.

**Esso/Mobil SBM** (1°14′N., 103°41′E.), a spherical lighted buoy, 12m in diameter, is connected to the SW side of Jurong Island by a pipeline extending about 3.2 miles SSW from the island. The controlling depth in the approach is 21m. Vessels up to 285,000 dwt can be accommodated.

(BA CH 2570; BA NP 44, Supp. 5/99)

10/02

Page 128—Lines 42/L to 21/R; read: curve in some places.

The following special purpose anchorages are located W and SW of Singapore:

- 1. Western Anchorage—General purpose.
- 2. Western Petroleum Anchorage A—For vessels of 10,000 gross tons or less loaded with petroleum and non gas-free vessels.
- 3. Western Petroleum Anchorage B—For vessels of over 10,000 gross tons loaded with petroleum and non gas-free vessels. Tankers exceeding 50,000 gross tons shall use Eastern Petroleum Anchorage A.
- 4. Western Quarantine and Immigration Anchorage—For vessels seeking quarantine and immigration clearance.
- 5. Pasir Panjang Holding Anchorage—For vessels as directed by the Port Master.
- 6. Selat Pauh Anchorage—For vessels under arrest, laid-up vessels, and other vessels with permission of the Port Master.
- 7. Raffles Reserved Anchorage—For LASH vessel operations, damaged vessels, vessels requiring emergency repairs, or as directed by the Port Master.
- 8. Tuas Petroleum Holding Anchorage—For tankers waiting to service vessels at anchorages in the Jurong Sector, waiting for berthing facilities in the West Jurong Fairway and Pesek Basin, or as directed by the Port Master.
- 9. West Jurong Anchorage—For vessels awaiting a berth, vessels under repair, or special vessels.

- 10. LPG/LNG/Chemical Gas Carriers Anchorage—For non gas-free LPG, LNG, and chemical carriers.
- 11. Very Large Crude Carrier Anchorage—Temporary anchorage for loaded VLCCs.
- 12. Sudong Holding Anchorage—Temporary holding anchorage used with prior permission of the Port Master.
- 13. Sudong Special Purposes Anchorage—Temporary holding anchorage for VLCCs with prior permission of the Port Master.
- 14. Sudong Explosive Anchorage—Replaces the Tuas Explosive Anchorage and the Tuas Explosive Lighter Anchorage. This anchorage is used for vessels and small craft loading or discharging explosives and Group 1 dangerous goods or vessels in transit with such cargo on board. The maximum height of vessels permitted at this anchorage is 47m.

The following special purpose anchorages are located SE of Singapore:

1. Changi General Purpose Anchorage—For vessels over 20,000 grt wishing to remain in port for not more than 8 hours for the purpose of exchanging crew or loading ship's stores, upon prior permission of the Port Master.

(4(9)02 Singapore)

19/02